

State of California The Resources Agency

Management of the California State Water Project Appendix D Costs of Recreation and Fish and Wildlife Enhancement



Coldon Kavan Week

Secretary for Resources The Resources Agency George Deukmeijan

Governor State of California David N. Kennedy

Director
Department of Water Resources

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ON THE COVER: Beach at Castaic Lagoon with Perris Dam and Spillway in the background.

Department of Water Resources
Bulletin 132-86

Management of the California State Water Project

Appendix D
Costs of Recreation and Fish
and Wildlife Enhancement

May 1987

Gordon K. Van Vleck Secretary for Resources

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FOREWORD

The Davis-Dolwig Act (Sections 11900-11925 of the California Water Code) declares that providing for the enhancement of fish and wildlife and for recreation in connection with State water projects benefits all of the people of California and that the costs attributable to such enhancement should be borne by them. The Act also provides a procedure through which the Department of Water Resources will be reimbursed for those project costs which are allocated to recreation and fish and wildlife enhancement and for costs of acquiring property for recreation development. The Department is to annually report such expenditures to the Legislature. If the Legislature approves the reported costs, a like amount of the State's tideland oil and gas revenues will be released to the Department from a continuing \$5,000,000 annual appropriation of tideland revenues which has been authorized specifically for that purpose (Public Resources Code Section 6217).

This constitutes the Department's 1986 report to the Legislature in compliance with the above requirement. An additional \$5,180,551 for recreation and fish and wildlife enhancement is reported herein. This amount consists of \$5,185,499 for joint capital costs of the State Water Project which is allocated to recreation and fish and wildlife enhancement, less \$4,948 for specific recreation land costs. The additional amount is mostly due to costs incurred in 1985 and interest accrued during 1985 on recreation costs not yet reimbursed by the continuing annual appropriation.

David N. Kennedy, Director Department of Water Resources

The Resources Agency State of California

State of California GEORGE DEUKMEJIAN, Governor

The Resources Agency GORDON K. VAN VLECK, Secretary for Resources

Department of Water Resources

DAVID N. KENNEDY, Director

JOHN P. CAFFREY
Deputy Director

ROBERT G. POTTER

Deputy Director

ROBERT E. WHITING
Deputy Director

SALLE S. JANTZ
Assistant Director

ROBERT W. JAMES Chief Counsel

STATE WATER PROJECT ANALYSIS OFFICE

Lawrence E. Swenson, Chief

This report was prepared under

the direction of

Donald R. Long, Chief, Project Cost Branch
Jesse J. Cason, Chief, Cost Allocation and Repayment Section

by

Mike Torabian, Assistant Engineer Nancy D. Ullrey, Research Writer Helen Sugiyama, Senior Stenographer

Assistance in report preparation was provided by

Earl G. Bingham, Research Writer

and on the basis of records compiled under the direction of

Donald E. Owen, Chief, Division of Land and Right of Way Donald A. Sandison, Chief, Division of Fiscal Services Chester M. Winn, Controller

CALIFORNIA WATER COMMISSION

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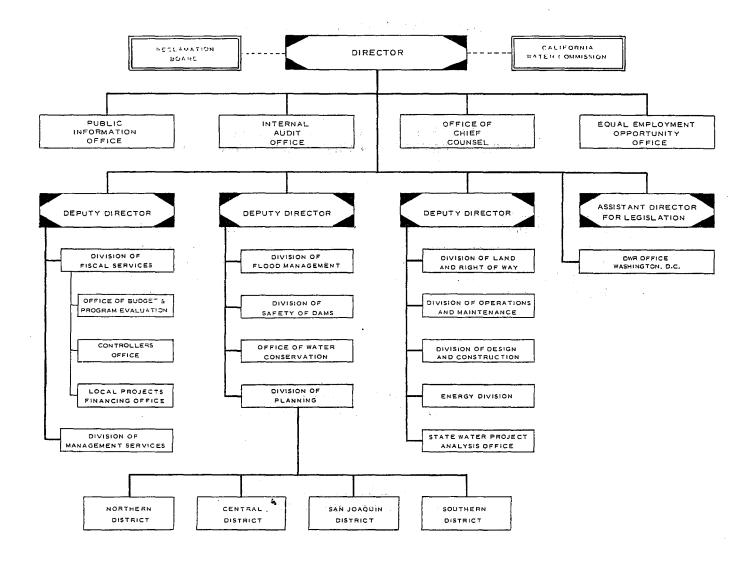
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The California Water Commission serves as a policy advisory body to the Director of Water Resources on all California water resources matters. The nine-member citizen commission provides a water resources forum for the people of the State, acts as a liaison between the legislative and executive branches of State Government and coordinates Federal, State, and local water resources efforts.

ORGANIZATION OF THE DEPARTMENT OF WATER RESOURCES



REPORTING OF RECREATION AND FISH AND WILDLIFE ENHANCEMENT COSTS

Section 11912 of the California Water Code assigns to the Department of Water Resources (Department) the following responsibilities:

It shall be the duty of the Department to report annually to the Legislature the costs, if any, which the Department has allocated to recreation and fish and wildlife enhancement for each facility of any state water project. The Department shall also report to the Legislature any revisions which the Department makes in such allocations.

The Department shall submit each such cost allocation to the Department of Navigation and Ocean Development (Department of Boating and Waterways), the Department of Parks and Recreation, and to the Department of Fish and Game. The Department of Navigation and Ocean Development, the Department of Parks and Recreation, and the Department of Fish and Game shall file with the Department of Water Resources their written comments with respect to each such cost allocation, which written comments shall be included in the report required by this section.

It shall also be the duty of the Department to report to the Legislature on any expenditure of funds for acquiring rights-of-way, easements and property pursuant to Section 346 for recreation development associated with such facilities ...

This appendix is the Department's 1986 report, as required by Section 11912 of the California Water Code.

For brevity, "fish and wildlife enhancement" is hereafter referred to as "enhancement." The Department's (DWR) cost allocations treat recreation and enhancement as one combined purpose of the State Water Project (SWP).

Organization of Report

Capital costs of SWP facilities allocated by DWR to recreation and enhancement, through December 31, 1985 are shown in Table 1, pages 8 and 9. Table 1 also shows the expenditures for acquiring rights of way, easements, and property for recreation development associated with such facilities. Table 2, on pages 14 and 15, details the accrued interest charges included in the costs shown in Table 1.

The notes to Table 1, pages 10 through 13, explain the DWR's procedures for reporting recreation and enhancement costs, describe how the amounts shown in the table are calculated, and reconcile significant changes from costs shown in previous reports.

The costs shown in Table 1 do not reflect new or revised allocations for any facility of the SWP. The derivation of allocation percentages indicated for joint capital costs of those multipurpose facilities listed in the upper portion of Table 1 have been described in previous reports. Copies of those descriptions are available upon request to DWR.

A summary of allocation percentages is shown on page 16, along with illustrative allocation percentages for facilities not yet reported.

Included at the end of this report are comments by the Department of Boating and Waterways, the Department of Parks and Recreation, and the Department of Fish and Game.

TABLE 1: RECREATION AND ENHANCEMENT
(Reported to the California Legislature in
(in

Trips				 				·		
13 12 13 15 15 15 15 15 15 15							1006			1070
		TIEM								
Processing								ianl Cas	a Allocata	٦.
Colifornia former Secretorian Secretoria Se							Joint C	apital Cos	s Allocate	a
Colifornia force Process Provingment Roof Ford 1, 1-16 1-16	1	California Water Resources Development Bond Fund All Other Funds	2,432,633		1,195		9.16	700	10,531	9,278
Control Cont	•	California Water Resources Development Bond Fund All Other Funds	3,940,705	1,414	1,806	513	1,731	1,348	18,514	16,099
Second Company		California Water Resources Development Bond Fund All Other Funds	527,433	25,194	47,579	88,268	22,115	8,197	78,430	45,879
Colifornia Victor Financies Development Earl Final State Colifornia Victor Colif	. 1	Los Banos Reservoir (3.4%) California Water Resources Development Bond Fund All Other Funds	1,360,585	9,347	12,561	11,665	4,870	5,660	-22,713	-2,289
California Pater Insures Development Bood Fund 17.51-00.00 17.51-0		California Water Resources Development Bond Fund All Other Funds	720,928	7,861	12,243	21,602	38,409	15,453	19,999	32,771
Pol Valle Plan and claim Pol Valle Plant Pol		California Water Resources Development Bond Fund All Other Funds	3,306,009	-37 23,796 23,759	26,144	28,467	28.087	515,025	83,103	-23 52,177 52,154
California Varier Schopman Development Bood Fund 10 there Funds 10 t		California Water Resources Development Bond Fund All Other Funds	10,546,762 2,150,539 12,697,301	0 9,614	115,645	7,835	9,976	3,656	9.324	
TOTAL 10.69,023 2,755,527 1,643,878 1,396,647 1,080,120 1,386,210 1,085,993 1,799,595		California Aqueduct, Dos Amigos P.P. to Termini (5.7%) California Water Resources Development Bond Fund All Other Funds	48,663,380 19,601,349	-2,130 2,719,794	-38,892 1,466,020	131 1,238,092	974,102	830,247	868,320	-155 1,602,475
Specific Costs of Acquiring Land for Freedom: Dam and Line California Water Recourses Development Bond Fund 3,170 0 0 0 0 0 0 0 0 0								·	,	
California Mater Resources Development Bond Fund 3,379 0 0 0 0 0 0 0 0 0		TOTAL	110,019,023	2,195,521	1,043,870					.:
California Marter Resources Development Bond Fund 3,377 0 0 0 0 0 0 0 0 0		Frenchmen Dam and Lake	} 			Spe	CITIC COSTS	of Acquiri	ng Lana to	r V
California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Sub		California Water Resources Development Bond Fund All Other Funds Subtotal	49,947	0	0	0	0	<u>0</u>	0	
California Water Resources Development Bond Fund All Other Funds Subtotals San Luts Dam and Esservoir, O'Neill Forebay, and Los Banan Reservoir, and Los Banan Reservoir, O'Neill Forebay, and Los Banan Reservoir, and Los Banan Res		California Water Resources Development Bond Fund All Other Funds	5,246	<u>0</u>	<u>o</u>	<u>o</u>	0 0 0	· · · · <u>o</u>		2,648
Section September Reserver California Nature Resources Development Bond Fund 188,262 19,102 118 508 662 729 1,075 55,019 188,266 19,102 118 508 662 729 1,075 55,019 188,266 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 118 508 662 729 1,075 55,019 189,262 19,102 189,262 19,102 189,262 19,102 189,262 19,102 189,262 19,102 189,262 19,102 189,262 19,102		California Water Resources Development Bond Fund All Other Funds	9,921	0		0	0 .	. 0	0	0
Californis Water Resources Development Bond Fund Notice Plant Subtotal Subt	44	and Los Banos Reservoir California Water Resources Development Bond Fund All Other Funds	188,562	19,102	118	508	692	729	1,075	56,049
California Mater Resources Development Bond Fund All Other Funds Subtotal Signature		California Water Resources Development Bond Fund All Other Funds	107,987		113	349	888	617		21,952
California Mater Resources Development Bond Fund All Other Funds Subtotal California Mater Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal TOTAL RECREATION AND ENNANCEMENT COSTS California Water Resources Development Bond Fund All Other Funds Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal Respect Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal Respect Subtotal California Water Resources Development Bond Fund All Other Funds Subtotal Respect Subtota		California Water Resources Development Bond Fund All Other Funds	336,761	-74 488 414	1,015	-3,762	1,880	1.637	101,263	
California Water Resources Development Bond Fund All Other Funds Subtotal 1,957,616 -2,978 -322 -109 0 0 0 0 0 0 0 0 0		California Water Resources Development Bond Fund All Other Funds	-40.887	2,017	820	403	- 44	0 88 88	707	
Castaic Dam and Lake California Water Resources Development Bond Fund 1,957,616 -2,978 -232 -109 0 0 0 0 0 0 0 0 0		California Water Resources Development Bond Fund All Other Funds	40,666	2,876	1,666	11,095	123	561	33.357	274,051
California Water Resources Development Bond Fund 425,291 -325		California Water Resources Development Bond Fund All Other Funds	142,361	28,270	6,550	89,836	10,841	18,589	0 49,662	113,056
California Water Resources Development Bond Fund 1,027,489 -5,176 0 0 0 0 0 0 0 0 0		California Water Resources Development Bond Fund All Other Funds	197,239	13,511	28,987	11,865		2,528	8,402	
TOTAL 18,028,380 77,678 47,872 143,022 20,177 24,704 279,867 692,021 TOTAL RECREATION AND ENHABLEMENT COSTS California Water Resources Development Bond Fund All Other Funds 89,862,308 -11,598 -39,634 -302 -131 -121 -:,572 -247 All Other Funds 89,862,308 3,785,095 2,884,803 1,731,384 1,539,991 1,100,428 1,405,035 1,345,432 2,481,813		California Water Resources Development Bond Fund All Other Funds	3,707,111	-5,176 20,464	8,922	32,890	0 15	0		206,806
TOTAL RECREATION AND ENHANCEMENT COSTS California Mater Resources Development Bond Fund All Other Funds 89,862,308 -11,598 -39,634 -302 -131 -121 -1,572 -247 38,785,095 2,884,803 1,731,384 1,539,991 1,100,428 1,405,035 1,345,432 2,481,813	en de la proposición de la companya de la companya La companya de la co	TOTAL			47 .872		20.177	24.704	279 .867	·
		TOTAL RECREATION AND ENHANCEMENT COSTS California Water Resources Development Bond Fund	89,862,308	-11,598	-39,634	-302	-131	-121	-1,572	-247
										

COST OF THE STATE WATER PROJECT (a Response to Water Code Section 11912) dollars)

										
1980	BY CALENDAR Y	1982	1983	1984	1985		**************************************			
(9)	(10)	(11)	(12)	(13)	(14)	TOTAL (15)	INTEREST (16)	TOTAL (17)	PREVIOUS (18)	INCREASE (19)
o Recreatio	on and Ent	ancement:	: (b			ļ				!
0 56,964 56,964	0 13,705 13,705	69,404 69,404	0 64,496 64,496	0 2,489 2,489	0 39,263 39,263	102,997 2,702,911 2,805,908	1,803 0 1,803	104,800 2,702,911 2,807,711	104,800 2,663,637 2,768,437	0 39,274 39,274
61,303 61,303	4,516 4,516	88,787 88,787	0 42,171 42,171	0 47,447 47,447	0 83,887 83,887	1,036,428 4,310,241 5,346,669	98,396 0 98,396	1,134,824 4,310,241 5,445,065	1,134,824 4,226,254 5,361,078	0 <u>83,987</u> 83,987
92,353 92,353	0 10,325 10,325	0 51,133 51,133	27,800 27,800	21,533 21,533	0 14,791 14,791	4,003,092 1,061,030 5,064,122	417,923 0 417,923	4,421,015 1,061,030 5,482,045	4,421,015 1,046,217 5,467,232	0 14,813 14,813
-2,078 19,269 17,191	-1,419 8,384 5,965	-35,272 281,990 246,718	-16,941 137,966 121,025	-15,505 64,231 48,726	-3.153 21,932 18,779	1,957,425 1,913,458 3,870,883	281,672 0 281,672	2,239,097 1,913,458 4,152,555	2,242,307 1,891,350 4,133,657	-3,210 22,108 18,898
28,506 28,506	0 194,722 194,722	0 145,514 145,514	0 58,656 58,656	84,752 84,752	39,607 39,607	4,467,667 1,421,023 5,888,690	749,756 0 749,756	5,217,423 1,421,023 6,638,446	5,217,423 1,381,122 6,598,545	0 39,901 39,901
-27 28,974 28,947	-29 18,411 18,382	-28 14,317 - 14,289	-9 17,996 17,987	0 17,266 17,266	0 4,952 4,952	5,725,225 4,164,724 9,889,949	1,725,254 1,725,254	7,450,479 4,164,724 11,615,203	7,450,479 4,159,716 11,610,195	5,008 5,008
0 35,871 35,871	23,936 23,936	0 24,576 24,576	77,693 77,693	0 164,372 164,372	42,062 42,062	10,546,762 2,708,432 13,255,194	5,503,352 0 5,503,352	16,050,114 2,708,432 18,758,546	16,050,114 2,664,484 18,714,598	0 43,948 43,948
3,473 2,286,613 2,290,086	2,382 1,979,740 1,982,122	59,123 3,169,852 3,228,975	28,400 2,350,310 2,378,710	25,997 1,504,582 1,530,579	5,293 829,467 834,760	48,745,678 41,420,963 90,166,641	52,086,495 0 52,086,495	100,832,173 41,420,963 142,253,136	96,794,462 40,519,004 137,313,466	4,037,711 901,959 4,939,670
2,611,221	2,254,673	3,869,396	2,788,538	1,917,164	1,078,101	136,288,056	60,864,651	197,152,707	191,967,208	5,185,499
Recreation	Developm	ent: (c								•
<u>0</u>	<u>o</u>	0 00	0 <u>0</u> 0	<u>o</u> <u>o</u>	0 00	3,379 -49,947 -53,326	134 0 134	3,513 49,947 53,460	3,513 49,947 53,460	0 0
56,918 56,918	76,931 76,931	451,796 451,796	0 2,792 2,792	-203,509 -203,509	. <u>0</u>	204,116 392,822 596,938	15,099 0 15,099	219,215 392,822 612,037	219,215 392,822 612,037	0 0
0 00	0 00	0 00	0 00	0 0 0	0 0 0	9,921 9,930	0 0	9,921 9,930	9,921 9,930	0 00
0 126 126	0 107 107	0 278 278	0 187 187	0 40 40	0 416 416	395,284 <u>267;989</u> 663;273	28,823 0 28,823	424,107 267,989 692,096	424,107 <u>267,573</u> 691,680	0 416 416
- <u>43.344</u> - <u>43.344</u>	11,275 11,275	44,919 44,919	0 12,828 12,828	-55,455 -55,455	-21,757 -21,757	461,086 168,121 629,207	134,710 0 134,710	595,796 168,121 763,917	595,796 187,755 783,551	0 -19,634 -19,634
-81 1,853 1,772	-88 1.033 945	-86 20,170 20,084	-26 41,068 41,042	174,755 174,755	0 <u>853</u> 853	7,809,509 680,347 8,489,856	3,015,073 0 3,015,073	10,824,582 680,347 11,504,929	10,824,582 678,845 11,503,427	0 1,502 1,502
0 389 389	0 314 314	0 292 292	499 499	0 <u>437</u> 437	0 807 807	519,425 -33,808 485,617	371,947 0 371,947	891,372 -33,808 857,564	891,372 -34,852 856,520	0 1,044 1,044
125,515 125,515	3,826 3,826	0 -11,992 -11,992	-13,190 -13,190	1,272 1,272	7,658 7,658	478,971 477,484 956,455	327,881 0 327,881	806,852 477,484 1,284,336	806,852 <u>472,089</u> 1,278,941	5,395 5,395
469,435 469,435	9,173 9,173	3,357 3,357	6,138 6,138	510 510	5,040 5,040	1,954,297 952,818 2,907,115	1,438,119 0 1,438,119	3,392,416 952,818 4,345,234	3,392,416 947,699 4,340,115	5,119 5,119
96,905 56,905	3,144 3,144	7,529 7,529	3,240 3,250	0 885 885	1,146 1,146	424,966 357,073 782,039	324,413 0 324,413	749,379 <u>357,073</u> 1,106,452	749,379 355,868 1,105,247	1,205 1,205
879,590 879,590	0 0 0	0 <u>-279</u> -279	0 0 0	0 0 0	0 0 0	1,022,313 4,939,979 5,962,292	832,644 0 832,644	1,854,957 4,939,979 6,794,936	1,854,952 4,939,979 6,794,931	5 .0 5
1,633,994	105,715	515,984	53,536	-81,065	-5,837	21,536,048	6,488,843	28,024,891	28,029,839	-4,948
1,287	846 2,359,542	23,737 4,361,643	11,424	10,492	2,140	89,858,629 67,965,475	67,353,494	157,212,123	66,819,430	4,034,506 1,146,045
4,245,215	2,360,388	4,385,380	2,842,074	1,836,099	1,072,264	157,824,104	67,353,494	225,177,598	219,997,047	5,180,551

Notes to Table 1, Pages 8 and 9

a) Recreation and enhancement costs refer only to (1) multipurpose facility capital costs allocated to recreation, and (2) the capital costs of lands acquired for associated recreation development. These costs are budgeted by DWR from funds that are available for

financing Project construction costs.

Recreation and enhancement costs not reported in Table 1 are budgeted by several State departments. These costs, financed by appropriations from a variety of funds, are summarized as follows:

		General Fund Appropria unless otherwise not	
Type of Recreation and Enhancement Costs Not Reported in Table 1	1986–87 ^{(a}	1985-86 ^{(Ъ}	Total 1962-63 thru 1986-87 ^{(c}
Allocated operation, maintenance, power and replacement costs of multipurpose facilities	₀ (a	0 ^{(d}	\$16,657,000
Capital costs of recreation developments	\$ 80,000	\$3,278,000	\$98,000,000 ^{(e(f}
Operation, maintenance, and replacement costs of recreation developments	\$7,559,000	\$7,279,000	\$73,323,000 ^{(g}

- Amounts in Governor's budget. 1985-86 budgeted amount.
- c) Actual through 1984-85 plus a) and b).
- No SWP operation and maintenance costs budgeted. a)
- Amounts from State recreation bond funds and other State and federal recreation funds.
- f) Includes \$1,236,000 from the Harbors and Watercraft Revolving Fund, and \$200,000 directly from the Highway Users Tax Fund.
- g) Operation, maintenance, power, and replacement costs are budgeted by the Department of Parks and Recreation; boating facility costs are budgeted by the Department of Boating and Waterways; and enhancement development costs are budgeted by the Department of Fish and Game.

Allocated operation, maintenance, power, and replacement (OMP&R) costs of multipurpose facilities are budgeted by DWR and financed by annual appropriations from the State General Fund. Capital costs (other than land acquisition costs), along with OMP&R costs of recreation facilities, are budgeted by the Department of Parks and Recreation. However, the costs of constructing boating facilities are budgeted by the Department of Boating and Waterways, and the costs of enhancement developments are budgeted by the Department of Fish and Game.

Joint capital costs allocated to recreation and enhancement are based on DWR's derivation, for each multipurpose facility, of the percentages of the total joint costs attributable to each included purpose. These derivations are based on the application of conventional cost allocation methods that weigh the estimated costs to be incurred and the benefits to be realized during a 50year period of analysis. Allocated costs reflect the application of these percentages to the actual capital costs incurred for each facility, as accounted by DWR.

Costs allocated to recreation and enhancement generally are first reported in the year following the year construction of a facility is completed. However, these allocated costs may be subsequently changed by either the adjustment of accounted capital costs or the revision of allocation percentages.

In response to questions raised by the Department of Finance, DWR retained a consulting economist to review the method and factors supporting the project purpose cost allocations for the SWP. The consultant's report was completed in January 1985. In general, the consultant agreed with the allocation method and the manner in which it is applied by DWR. The Department of Finance received a copy of the report in February 1985.

c) Specific costs of acquiring land for recreation development are incurred by DWR under the authority of California Water Code Section 346. DWR purchases recreation land concurrently with other lands needed for multipurpose facilities, in order to (1) decrease the total land costs of the Project, and (2) acquire property in an orderly manner. Recreation lands acquired for each Project facility through September 30, 1985 are shown in the following table:

SUMMARY OF RECREATION LAND ACQUISITIONS

(in acres)

\.	n acres)			
Project Facility	Acquired ^{(b}	To Be Acquired	Federal Lands ^{(c}	Total
Frenchman Lake	719	0	0	719
Antelope Lake	1,342	Ō	Ō	1,342
Lake Davis	733	0	0	733
San Luis Reservoir and O'Neill Forebay	2,518	0	0	2,518
Oroville Division	2,993	0	212	3,205
Lake Del Valle	1.206	(0 (e	0	1,206
California Aqueduct (excluding reservoirs)	1,834 ^{(d}	(е	0	1,834
Castaic Lake	1,915	0	577	2,492
Silverwood Lake	3,223	0	0	3,223
Lake Perris	4,351	<u>115</u>	0	4,466
Total	20,834	115	789	21,738

a) Includes recreation lands for only those project facilities with an established recreation land use and acquisition plan.

b) Costs of acquiring these lands are shown in Table 1.

c) These lands are presently being leased from the federal government at a nominal cost to the State.

d) Possession and control of a portion of these lands will be transferred to the Department of Fish and Game for use in the Department's Southern California wildlife mitigation program. When the transfer is made, the acreage will be reduced accordingly.

e) Additional land needs are to be identified by future studies.

DWR reports the annual expenditure of Project funds for acquiring all recreation land in the year following the expenditure. The costs of such lands generally are established when acquired, and are not affected by the allocation percentages for the associated multipurpose Project facility. However, the reported costs of certain lands may be subsequently revised due to (1) receipt of certain revenues (such as federal grants and miscellaneous income from rights of way sales), or (2) modification of the recreation land use plan.

The amounts to be reported in future years will include credits for any reduction in previously reported costs, together with interest income thereon. If recreation land is sold or if grants are received, the amount will be reported as a negative cost of the facility in the year received. If recreation land is reclassified as multipurpose Project land, the original purchase price, together with appropriate interest income, will be reported as a negative expenditure for specific land costs, and an appropriate amount will be added to joint capital costs allocated to recreation and enhancement for the associated facility.

The costs of acquiring land for recreation development reported herein include about \$1.1 million for land that will be used to mitigate impacts to wildlife habitat in Southern California resulting from construction of the SWP. As these lands are redesignated from recreation to Project (wildlife mitigation) purposes, the amounts to be reported in future years will include credits for the reduction in previously reported costs, together with appropriate interest income thereon.

The costs of acquiring recreation land also include the salaries of DWR personnel engaged in recreation land acquisition activities, together with indirect costs distributed on the basis of direct salaries.

d) Interest accruals are calculated as shown in Table 2. Interest charges are accrued only on the portion of annual disbursements financed by the California Water Resources Development Bond Fund (proceeds from the sale of Burns-Porter bonds) and cease when such disbursements, together with cumulative interest accruals thereon, have been reimbursed. Calculations are based on the weighted average interest costs of Burns-Porter bonds sold to date (4.378 percent for the \$1.57 biliion in bonds outstanding on December 31, 1985). This rate differs from the "Project Interest Rate" under SWP water supply contracts, in that interest costs on revenue bond sales are not included.

DWR is currently considering selling Water System Revenue Bonds to finance additional multipurpose facilities. Future interest accruals to be reported in Table 2, may include a portion of the interest costs of these revenue bonds.

As of December 31, 1985, a total of \$90 million had been reimbursed to DWR under the continuing annual \$5 million appropriation (through fiscal year 1984-85) of State tideland oil and gas revenues, authorized by California Statutes of 1966, First Extraordinary Session, Chapter 27.

With no allowance for future interest, reported reimbursement of the costs would cover the annual appropriations in the full amounts for each fiscal year through fiscal

- year 2012-2013, together with \$281,779 of the appropriation for 2013-2014. With future interest computed at 4.378 percent, reported reimbursement of the costs would be covered by appropriations in the full amounts for each fiscal year through 2030-2031, together with \$1,204,422 of the appropriation for 2031-2032.
- e) Costs previously reported are as shown in Table 1 (pages 8 and 9) of Appendix D to Bulletin 132-85. Such costs were based on DWR's accounting records as of December 31, 1984. The average interest cost on Burns-Porter bond sales was then 4.378 percent.
- f) Reasons for cost increases are outlined below:
- o Additional disbursements during 1985 for recreation lands and for joint capital costs allocated to recreation and enhancement...... \$1,072,000

- o Additional accrued interest on recreation costs not yet reimbursed by the continuing \$5 million annual appropriation due to changes in bond fund expenditures and an additional year of accrual (1985).........\$4,032,000
- o Adjustment to allocated costs for Del Valle Dam and Lake for 1985 activity processed in 1985......\$2,000
- o Adjustments to allocated costs for Dos Amigos to Termini and for capitalized O&M costs in 1984 at Warne Powerplant......\$73,000
- o Adjustment in previously reported Oroville Division specific recreation land costs for right of way activity after the cut-off date for Appendix D to Bulletin 132-85...\$1,000
- o Other retroactive accounting adjustments or costs reported prior to 1985\$1,000

TOTAL INCREASE......\$5,181,000

TABLE 2: CALCULATION OF INTEREST ACCRUALS ON CALIFORNIA (in dollars

Joint Capital Costs allocated to pecepation and enhancement											
YEAR	. 1	ITEN	FRENCHHAN DAM AND LAKE	ANTELOPE DAM AND LAKE	GRIZZLY VALLEY DAM AND LAKE DAVIS	SAN LUIS DAM & RESERVOIR, O'NEILL FOREBAY & LOS BANOS RESERVOIR	CALIFORNIA AQUEDUCT DELTA TO DOS AHIGOS P.P.	OROVILLE DIVISION	DEL VALLE DAH AND LAKE DEL VALLE	CALIFORNIA AQUEDUCT DOS AMIGOS P.P. TO TERMINI	TOTAL
	•		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1952- 1981	a.	Disbursements: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	102,997 2,527,259	1,036,428 4,047,949	4,003,092 945,773	2,028,296 1,407,339	4,467,667 1,092,494	5,725,262 4,110,193	10,546,762 2,399,729	48,626,865 33,566,752	76,537,369 50,097,488
	ь.	Reimbursements: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	104,800 2,527,259	1,134,824	4,421,015 945,773	2,313,918 1,407,339	5,217,423 1,092,494	7,450,519 4,110,193	16,050,113 2,399,729	. 0	36,692,612 16,530,736
	c.	Interest Accruals	1,803	98,396	417,923	285,622	749,756	1,725,257	5,503,352	36,428,300	45,210,409
1982	d.	Beginning of Year Balance to be Reimbursed; 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0	0	0	0	0	, 0	· 1	85,055,165 33,566,752	85,055,166 33,566,752
	e.	Disbursements During Year: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	69,404	88,787	0 51,133	-35,272 281,990	145,514	-28 14,317	0 24,576	59,123 3,169,852	23,823 3,845,573
	r.	Reimbursements During Year Applied to: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0	0	0	0	0	0	0	0	0
	g.	End-of-Year Balance Without Interest for: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0 69,404	0 88,787	0 51,133	-35,272 281,990	0 145,514	-28 14,317	24,576	85,114,288 36,736,604	85,078,989 37,4)2,325
		Interest Accrual on Average Balance	0	0	0	-772	0	-1	0	3,725,009	3,724,236
1983	i.	Beginning of Year Balance to be Reimbursed: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0 69,404	88,787	0 51,133	-36,044 281,990	0 145,514	-29 14,317	1 24,576	88,839,297 36,736,604	88,803,225 37,412,325
	J.	Disbursements During Year: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	64,496	42,171	0 27,800	-16,941 137,966	0 58,656	-9 17,996	77,693	28,400 2,350,310	11,450 2,777,088
	k.	Reimbursements During Year Applied To: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0 0	0	0	0	0	0	0	0	0
	1.	1. Calif. Water Resources Development Bond Fund 2. All Other Funds	133,900 0	130,958 0	78,933 0	-52,985 419,956	204,170 0	-38 32,313 -1	1 102,269 0	88,867,697 39,086,914	88,814,675 40,189,413
1001	p.	Interest Accrual on Average Balance	ļ			-1,949				3,890,006	3,888,056
984	n.	Beginning of Year Balance to be Reimbursed: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	133,900	130,958	78,933	-54,934 419,956	0 204,170	-39 32,313	1 102,269	92,757,703 39,086,914	92,702,731 40,189,413
	0.	Disbursements During Year: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	2,489	0 47,447	21,533	-15,505 64,231	84,752	17,266	164,372	25,997 1,504,582	10,492 1,906,672
	p.	Reimbursements During Year Applied to: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0 136,389	0 178,405	0 100,466	-70,439 484,187	288,922	-39 49,579	1 266,641	2,312,041 0	2,241,564 1,504,589
	q.	End-of-Year Balance Without Interest for: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0	0	0	0	0	0	0	90,471,659 40,591,496	90,471,659 40,591,496
		Interest Accrual on Average Balance	0	0		-1,203	0	-1	0	4,010,891	4,009,687
1985	s.	Beginning of Year Balance to be Reimbursed: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0	0	0	-1,203 0	0	-1 0	0	94,482,550 40,591,496	94,481,346 40,591,496
	t. 	Disbursements During Year: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0 39,263	83,887	0 14,791	-3,153 21,932	0 39,607	0 4,952	0 42,062	5,293 829,467	2,140 1,075,961
	u.	Reimbursements During Year Applied to: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds	0 39,263	83.887	0 14,791	-4,356 21,932	0 39,607	-1 4,952	42,062	4,763,476 0	4,759,119 246,494
	v.	End-of-Year Balance Without Interest for: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds Interest Accrual on Average Balance	0	0	0	0 0	0 0	0	0 0	89,724,367 41,420,963	89,724,367 41,420,963
1004			<u> </u>			-26				4,032,289	4,032,263
986	х.	Beginning of Year Balance to be Reimbursed: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds TOTAL	0	0 0 0	0 0 0	-26 0 -26	0 0 0	0 0 0	0 0 0	93,756,656 41,420,963 135,177,619	93,756,630 41,420,963 135,177,593
	у.	Disbursements: 1. Calif. Vater Resources Development Bond Fund 2. All Other Funds TOTAL	102,997 2,702,911 2,805,908	1,036,428 4,310,241 5,346,669	4,003,092 1,061,030 5,064,122	1,913,458	4,467,667 1,421,023 5,888,690	5,725,225 4,164,724 9,889,949	10,546,762 2,708,432 13,255,194	48,745,678 41,420,963 90,166,641	76,585,274 59,702,782 136,288,056
	z.	Reimbursements: 1. Calif. Water Resources Development Bond Fund 2. All Other Funds TOTAL	104,800 2,702,911 2,807,711	1,134,824 4,310,241 5,445,065	4,421,015 1,061,030 5,482,045	2,239,123 1,913,458 4,152,581	5,217,423 1,421;023 6,638,446	7,450,479 4,164,724 11,615,203	16,050,114 2,708,432 18,758,546	7,075,517 0 7,075,517	43,693,295 18,281,819 61,975,114
		TOTAL INTEREST ACCRUALS, 1952 THROUGH 1986	1,803	98,396	417,923	281,672	749,756	1,725,254	5,503,352	52,086,495	60,864,651

WATER RESOURCES DEVELOPMENT BOND FUND DISBURSEMENTS @ 4.378% per annum)

	FRENCHMAN	GRIZZLY VALLEY	ABBEY BRIDGE	SAN LUIS DAM & RESERVOIR, O'NEILL FOREBAY	CALIFORNIA AQUEDUCT DELTA TO	OROVILLE DIVISION	DEL VALLE DAM AND	CALIFORNIA AQUEDUCT DOS AMIGOS	CASTAIC DAM AND	CEDAR SPRINGS DAM AND	PERRIS DAM AND	TOTAL	GRAND TOTAL
	DAM AND LAKE	DAM AND LAKE DAVIS	DAM AND RESERVOIR	& LOS BANOS RESERVOIR	DOS AMIGOS P.P.		LAKE DEL VALLE	P.P. TO TERMINI	LAKÉ	SILVERWOOD LAKE	LAKE PERRIS		
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	3,379 49,947	204,116	9,921	395,284 267,068	461,086 187,586	7,809,621 443,501	519,425 -35,843	478,971 493,736	1,954,297 937,773	424,966 344,273	1,022,313	13,273,467 7,779,963	89,810,836 57,877,451
	3,513 49,947	219,215	9,921	424,107 267,068	595,796 187,586	10,824,703 443,501	891,363 -35,843	806,844 493,736	3,391,902 937,773	748,989 344,273	1,845,240 4,185,266	19,751,681	56,444,293 23,555,707
<u>'</u>	134	15,099	0	28,823	134,710	3,015,082	371,947 9 0	327,881 8 0	1,438,067 462 0	324,374	831,650 8,723 754,992	9,553 754,992	51,698,176 85,064,719 34,321,744
	0	0 451,796	0	0 278	0 84,919	-86 20,170	0 292	0 -11,992	3,357	· 0 7,529	0 -279	-86 516,070	23,737 4,361,643
	0	0	. 0	0	. 0	0 G	. 0	0	0	0	G G	0	0
	0	0 457,796	0	0 278	0 44,919	-86 20,170	9 292	-11,992	462 3.357	351 7,529	8,723 754,713	9,467 1,271,062	85,088,456 38,683,38?
	0	0	0	0	0	-2 -88	9	8	20 482	366	9,105	9,882	3,724,651 88,813,107
		451,796	0	-,,	44 ,9 19	20,170	292	-11,992	3,357	7,529	754,713	1,271,062	38,683,387
	o o	2,792	0		12,828	-26 41,068	499	-13,190	6,138	3,240	0	-26 53,562	11,424 2,830,650
	0	0	0		0	0	0.	0	0	0	0	0	0
•	0	0 454,588 0	. 0		57,747 0	-114 61,238 -4	9 791 0	-25,182 0	482 9,495 21	366 10,769	9,105 754,713 399	9,856 1,324,624	88,824,531 41,514,037 3,888,488
	. 0	0 454,588	0		0 57,747	-118 61,238	9 791	-25,182	503 9,495	382 10,769	9,504 754,713	10,288	92,713,019 41,514,037
	0	0 -203,509	0		-55,455	0 174,755	0 437	0 1,272	0 510	0 885	0 0	0 -81,065	10,492 1,825,607
	0	0 251,079	0		5,292 0	-1.18 235,993	1,228	-23,910	503 10,005	382 11,654	9,504 754,713	10,288 1,243,559	2,251,852 2,748,148
	0	0 0	0	c	0	0	0	0	0	0	0	0	90,471,659 40,591,496
	0	0	0	0	0	-3 -3	0	0	. 11	8	208	224	94,481,570
	0	0	0	0	0	0	0	.0	0	0	0	0	40,591,496
	0	0 0	0	0	-21,757 0 -21,757	853 -3 853	0 807	7,658 0 7,658	5,040 11 5,040	1,146 8 1,146	208	-5,837 224	1,070,124 4,759,343 240,657
	0	0	0	٥	0 0	0	. 0	0 0	0 6	0	0	-5,837 0	89,724,357 41,420,963
	0	0	0		0	. 0	0	0	0	0	5	5	4,032,268
	0 0	0	0	0	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	5 0 5	5 0 5	93,756,635 41,420,963 135,177,598
	3,379 49,947 53,326	204,116 392,822 596,938	9 9,921 9,930	267,989	461,086 168,121 629,207	7,809,509 680,347 8,489,856	519,425 -33,808 485,617	478,971 477,484 956.455	1,954,297 952,818 2,907,115	424,966 357,073 782,039	1,022,313 4,939,979 5,962,292	13,273,355 8,262,693 21,536,048	89,858,629 67,965,475 157,824,104
	3,513 49,947 53,460	219,215 392,822 612,037	9 9,921 9,930	267,989	595,796 168,121 763,917	10,824,582 680,347 11,504,929	891,372 -33,808 857,564	806,852 477,484 1,284,336	3,392,416 952,818 4,345,234	749,379 357,073 1,106,452	1,854,952 4,939,979 6,794,931	19,762,193 8,262,693 28,024,886	63,455,488 26,544,512 90,000,000

Summary of Allocation Percentages

Each year DWR determines water contractor charges for the SWP based on allocations of costs among purposes of facilities used for more than a single purpose. These determinations are based on the percentages previously

reported to and approved by the Legislature, as well as preliminary estimates for facilities not yet reported. These percentages are summarized in the following table:

SUMMARY OF COST ALLOCATION PERCENTAGES

(in percent of joint costs of the respective facilities)

	Reimbursable Purposes	Nonrein	bursable Purposes	
Facilities of the State Water Project	Water Supply and Power Generation	Flood Control	Recreation and Fish and Wildlife Enhancement	Total
	Capital Costs o	f Features J	ointly Used	.,
Project Conservation Facilities				
Frenchman Dam and Lake ^{(a} Antelope Dam and Lake ^{(a} Grizzly Valley Dam and Lake Davis ^{(a} Oroville Division ^{(a(b}	21.5 0 1.0 97.1	0 0 0	78.5 100.0 99.0 2.9	100.0 100.0 100.0 100.0
California Aqueduct, Delta to Dos Amigos Pumping Plant ^{(a} Delta Facilities ^{(C}	96.6 86.0	0	3.4 14.0	100.0
Project Transportation Facilities				
Grizzly Valley Pipeline	100.0	· O	0	100.0
North Bay Aqueduct(c	100.0	0	0	100.0
South Bay Aqueduct: Del Valle Dam and Lake Del Valle ^{(a} Remainder of South Bay Aqueduct	25.2 100.0	26 . 8 0	48 . 0 0	100.0
California Aqueduct: California Aqueduct, Delta to Dos Amigos Pumping Plant(a California Aqueduct, Dos Amigos	96.6	0	3 . 4	100.0
Pumping Plant to Termini excluding the Coastal Branch ^{(a}	94.3	0	5.7	100.0
Coastal Branch	100.0	0	o .	100.0

a) Final percentages, subject to review as discussed on Page 11.

b) Percentages are applicable to Capital Costs of Features Jointly Used, minus Federal Flood Control Payments.

c) Illustrative percentages only, assumed for current project financial and repayment analyses.

NOTE: Percentages shown are those applicable to the costs of the facilities as accounted by the State, or, in the case of Federal-State joint-use facilities (San Luis Facilities), only the State's share of the total cost.

COMMENTS BY THE DEPARTMENT OF BOATING AND WATERWAYS, THE DEPARTMENT OF PARKS AND RECREATION, AND THE DEPARTMENT OF FISH AND GAME

Memorandum

To : David N. Kennedy

Director

Department of Water Resources

Date :

Subject: Cos

Cost Allocations to Recreation and Fish and

Wildlife Enhancement, State Water Project

From: Department of Boating and Waterways

In accordance with Section 11912 of the California Water Code, the Department of Boating and Waterways has reviewed the subject allocations and we have no comments.

WILLIAM H. IVERS

Director

Memorandum

Date : SEP 1 0 1986

To : Honorable David N. Kennedy, Director Department of Water Resources

From: Department of Parks and Recreation

Subject: Annual Report to the Legislature
Cost Allocations to Recreation and
Fish and Wildlife Enhancement
State Water Project

In accordance with California Water Code Section 11912, the Department of Parks and Recreation has reviewed your Bulletin 132-86 (Cost of Recreation and Fish and Wildlife Enhancement) Appendix D. The report appears consistent with those presented in previous years. Since it would take a great deal of research and staff time to verify your allocations, we will assume the figures to be correct and will be verified at a later date by an audit.

Wm. S. Briner Director

Memorandum

David N. Kennedy, Director Department of Water Resources 1416 Ninth Street Sacramento, CA 95814 Date: September 12, 1986

From: Department of Fish and Game

Subject: Department of Water Resources Bulletin 132-86, Appendix D - Costs of Recreation and Fish and Wildlife Enhancement

Thank you for the opportunity to review the referenced report. My staff has reviewed the document and finds that it adequately describes DWR's costs which have been expended for fish and wildlife.

Jack C. Parnell

CONVERSION FACTORS

Quantity	To Convert from Metric Unit	To Customary Unit	Multiply Metric	o Convert to Metric Unit Multiply Customary Unit By
Length	millimetres (mm)	inches (in)	0.03937	25.4
v	centimetres (cm) for snow depth	inches (in)	0.3937	2.54
	metres (m)	feet (ft)	3.2808	0.3048
	kilometres (km)	miles (mi)	0.62139	1.6093
Area	square millimetres (mm²)	square inches (in²)	0.00155	645.16
	square metres (m²)	square feet (ft²)	10.764	0.092903
	hectares (ha)	acres (ac)	2.4710	0.40469
	square kilometres (km²)	square miles (mi²)	0.3861	2.590
Volume	litres (L)	gallons (gal)	0.26417	3.7854
	megalitres	million gallons (10° gal)	0.26417	3.7854
	cubic metres (m³)	cubic feet (ft³)	35.315	0.028317
	cubic metres (m³)	cubic yards (yd³)	1.308	0.76455
	cubic dekametres (dam³)	acre-feet (ac-ft)	0.8107	1.2335
Flow	cubic metres per second (m³/s)	cubic feet per second (ft³/s)	35.315	0.028317
	litres per minute (L/min)	gallons per minute (gal/min)	0.26417	3.7854
	litres per day (L/day)	gallons per day (gal/day)	0.26417	3.7854
	megalitres per day (ML/day)	million gallons per day (mgd)	0.26417	3.7854
	cubic dekametres per day (dam³/day)	acre-feet per day (ac- ft/day)	0.8107	1.2335
Mass	kilograms (kg)	pounds (lb)	2.2046	0.45359
	megagrams (Mg)	tons (short, 2,000 lb)	1.1023	0.90718
Velocity	metres per second (m/s)	feet per second (ft/s)	3.2808	0.3048
Power	kilowatts (kW)	horsepower (hp)	1.3405	0.746
Pressure	kilopascals (kPa)	pounds per square inch (psi)	0.14505	6.8948
	kilopascals (kPa)	feet head of water	0.33456	2.989
Specific Capacity	litres per minute per metre drawdown	gallons per minute per foot drawdown	0.08052	12.419
Concentration	milligrams per litre (mg/L)	parts per million (ppm)	1.0	1.0
Electrical Conductivity	microsiemens per centimetre (uS/cm)	micromhos per centimetre	e 1.0	1.0
Temperature	degrees Celsius (°C)	degrees Fahrenheit (°F)	(1.8 × °C)+	32 (°F-32)/1.8

State of California—Resources Agency
Department of Water Resources
P.O. Box 942836
Sacramento
94236-0001

